

## Diabetesity 2021: Micronutrients efficacy: Comparison of the efficiency of consumption of flour enriched with NaFeEDTA with that enriched with elemental iron on the iron status of women of childbearing age

**Meryem Lazrak**

Ibn Tofail University- Cnesten, Joint Research Unit in Nutrition and Food Urac 39, Rdc-Nutrition Afra/

### Abstract

Nutrition is one of the major determinants aimed at contributing to improving the health status of the population. In Morocco, anemia is public health problem among women (36 %). Two independent studies were conducted. One on the effectiveness of the consumption of fortified flour with elemental iron. Another on the efficiency of the consumption of fortified flour with NaFeEDTA. To compare the efficiency of consumption of fortified flour with elemental iron with the efficiency of the consumption of fortified flour with NaFeEDTA on the iron status of women of childbearing age. In the first study women consumed a test meal composed from fortified bread fortified with Na<sup>57</sup>FeEDTA plus water. Iron absorption was measured by the erythrocyte incorporation of <sup>57</sup>Fe labels after 14 days. In the second study, after 4 years of fortification of elemental iron flour, we determined the prevalence of iron deficiency Efficacy study with flour fortified with NaFeEDTA showed a bioavailability of 33.9% in anemic women and a bioavailability of 16.9% in non-anemic women. NaFeEDTA has a high bioavailability especially among anemic women. The Efficacy study with flour fortified with elemental iron showed no change in iron status of women of childbearing age. The Moroccan government has decided to replace elemental iron with NaFeEDTA in wheat flour to combat iron deficiency.

### Biography

Meryem LAZRAC PhD student, 30 years, from ibn tofail University- CNESTEN, Joint Research Unit in Nutrition and Food URAC 39, RDC-Nutrition AFRA/IAEA  
She has published one paper: The opposing effects of acute inflammation and iron deficiency anemia on serum hepcidin and iron absorption in young women in Haematologica journal and a second paper during the correction